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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,997	03/16/2004	William J. Begley	87887AEK	3335

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EXAMINER	
GARRETT, DAWN L	
ART UNIT	**PAPER NUMBER**
1794	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/801,997	BEGLEY ET AL.	
	Examiner	Art Unit	
	Dawn Garrett	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 February 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *53 and 54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *53 and 54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 August 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office action is responsive to the amendment filed February 25, 2009. Claims 1-52, 55 and 56 are cancelled. Claims 53 and 54 are pending. The prior election of species is now withdrawn. The examiner notes that formula (I) as claimed encompasses rubrene, because each of a, b, c, d, e, and f may be zero.

2. The rejection of claims 1, 15-17, 22, 24, 25, 27-33, 35-39, 40-42, and 43-47 under 35 U.S.C. 103(a) as being obvious over Hatwar (US 2004/0058193 A1) is withdrawn due to the cancellation of the claims.

3. The rejection of claims 1, 15-17, 22, 43, and 44 under 35 U.S.C. 103(a) as being obvious over Hatwar et al. (US 2005/0147844 A1) is withdrawn due to the cancellation of the claims.

4. The rejection of claims 1, 15-17, 22, 24, 25, 27-33, 41, 42, 46, and 47 under 35 U.S.C. 103(a) as being unpatentable over Matsuura et al. (US 5,503,910) in view of Sato et al. (JP 04-335087) in further view of Hoag et al. (US 2003/0201415 A1) is withdrawn due to the cancellation of the claims.

5. The rejection of claims 35-40, 43, and 44 under 35 U.S.C. 103(a) as being unpatentable over Matsuura et al. (US 5,503,910) in view of Sato et al. (JP 04-335087) in further view of Hoag et al. (US 2003/0201415 A1) and Kobori et al. (US 6,285,039) is withdrawn due to the cancellation of the claims.

6. The rejection of claims 55 and 56 under 35 U.S.C. 103(a) as being unpatentable over Matsuura et al. (US 5,503,910) in view of Sato et al. (JP 04-335087) in further view of Hoag et

al. (US 2003/0201415 A1) and Ottermann et al. (US 2003/0193286 A1) is withdrawn due to the cancellation of the claims.

7. The rejection of claim 45 under 35 U.S.C. 103(a) as being unpatentable over Matsuura et al. (US 5,503,910) in view of Sato et al. (JP 04-335087) in further view of Hoag et al. (US 2003/0201415) in further view of Yamauchi et al. (US 5,640,067) is withdrawn due to the cancellation of the claim.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 53 and 54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear if formula (I) is required to have a substituent group. Each of variables "a" through "f" may be zero, but there is also a proviso that at least one of R1-R6 is a substituent. These limitations are not consistent with one another. The claims have been interpreted such that all of "a" through "f" may be zero and therefore no substituents are required. Clarification and/or correction are required.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

> such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claim 53 is rejected under 35 U.S.C. 103(a) as being obvious over Hatwar (US 2004/0058193).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Claim 1 of Hatwar teaches the required layers (see pages 15-16). Dependent claim 8 sets forth the required boron compounds (see page 17). Claim 3 teaches the yellow dopant. It is noted that naphthacene yellow dopants other than NR and DBzR are within the general formula in Hatwar. See also the features of Hatwar claims 10, 11, 13-32 (especially claim 20, which sets forth a transparent electron transporting layer). Although Hatwar does not appear to *exemplify* a device comprising a naphthacene derivative according to the specific provisos of the claims,

compounds within the group of those recited is clearly taught by the Hatwar general formula shown in Hatwar claim 1. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to have selected any of the naphthacene derivatives taught by Hatwar for the yellow dopant of the hole transporting layer, because one would expect any of the naphthacene derivatives taught by Hatwar to provide a well-performing yellow light emitting layer similar to the exemplified compounds.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claim 53 is rejected under 35 U.S.C. 102(a) and102(e) as being anticipated by Hatwar (US 6,696,177).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

'177 discloses an OLED comprising a blue light emitting layer (see claim 1) and a doped hole transport layer (see claim 1). The yellow region includes a rubrene compound (see claim 2). The blue dopant includes perylene (see claim 7). The concentration of blue dopant is 0.1-10% (see claim 9). The electron transport layer is transparent (see claim 14).

14. Claim 53 is rejected under 35 U.S.C. 102(a) and 102(e) as being anticipated by Hatwar (US 6,627,33 B2).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

'333 sets forth an OLED comprising a blue light emitting layer (see claim 1) and a doped hole transport layer (see claim 1). The yellow region includes a rubrene compound (see claim 2). The blue dopant includes a perylene (see claim 14). The concentration of blue dopant is 0.1-10% (see claim 15). The electron transport layer is transparent (see claim 5).

15. Claim 53 is rejected under 35 U.S.C. 102(e) as being anticipated by Hatwar (US 6,720,092).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

'092 sets forth an OLED comprising a blue light emitting layer (see claim 1) and a doped hole transport layer (see claim 1). The yellow region includes a rubrene compound (see claim 2). The blue dopant includes a perylene (see claim 5). The blue dopant concentration is 0.1-10% (see claim 7). The electron transport layer is transparent (see claim 13).

Double Patenting

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claim 53 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 7, 9, 15-17, 22, 24, 30-32, 36, 37, 39, 48, 49, 50, 55, 57, 63, and 68 of U.S. Patent No. 6,696,177. Although the conflicting claims are not identical, they are not patentably distinct from each other because '177 discloses an OLED comprising a blue light

emitting layer (claim 1) and a doped hole transport layer (claim 1). The yellow region includes a rubrene compound (claim 2). The blue dopant includes perylene (claim 7). The concentration of blue dopant is 0.1-10% (claim 9). The electron transport layer is transparent (claim 14). Although the claim wording is not identical, '177 claims all of the features of the present claim.

18. Claim 53 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 5, 14-16, 20, 37, 38, 40, and 46 of U.S. Patent No. 6,627,333. Although the conflicting claims are not identical, they are not patentably distinct from each other because '333 sets forth an OLED comprising a blue light emitting layer (claim 1) and a doped hole transport layer (claim 1). The yellow region includes a rubrene compound (claim 2). The blue dopant includes a perylene (claim 14). The concentration is 0.1-10% (claim 15). The electron transport layer is transparent (claim 5). Although the claim wording is not identical, '333 claims all of the features of the present claim.

19. Claim 53 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 7, 13, 14, 18, 20, 26, 31, 33, 39, 40, 45, 47, and 53 of U.S. Patent No. 6,720,092. Although the conflicting claims are not identical, they are not patentably distinct from each other because '092 sets forth an OLED comprising a blue light emitting layer (claim 1) and a doped hole transport layer (claim 1). The yellow region includes a rubrene compound (claim 2). The blue dopant includes a perylene (claim 5). The concentration is 0.1-10% (claim 7). The electron transport layer is transparent (claim 13). Although the claim wording is not identical, '092 claims all of the features of the present claim.

Allowable Subject Matter

20. Claim 54 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Response to Arguments

21. Applicant's arguments filed February 25, 2009 have been fully considered but they are not persuasive.

Applicant's arguments with regard to Hatwar (US 2004/0058193) being based upon an abandoned application is not sufficient to overcome the 35 U.S.C. 103(a) rejection. See the above rejection for methods to overcome the 35 U.S.C. 103(a) rejection including a proper statement of common ownership.

Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571) 272-1523. The examiner can normally be reached Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dawn Garrett/
Primary Examiner, Art Unit 1794